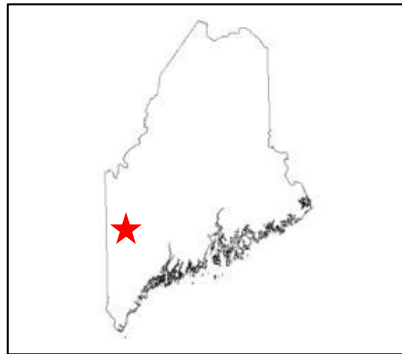


## Geologic Site of the Month

August, 2013

### ***Mineral Collecting in Newry, Maine***



Text and photos by  
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## Introduction

During the last four years the Maine Geological Survey (MGS) organized a series of field trips for the public to a famous group of quarries in Newry, Maine. These quarries have been worked since early 1900s for feldspar, gem tourmaline, and other minerals. We will have a look at the sites visited during these trips and some of the minerals that have been found there.



**Figure 1.** MGS trip participants getting instructions before heading up to the quarries.

Location

The Newry quarries are located on a scenic and remote mountain top. They have been popular with generations of mineral collectors. However, all of the quarries are on private property and visits have to be arranged in advance.



**Figure 2.** View from the Nevel Quarry, looking east across the Ellis River valley.

### Pegmatite

The quarries at Newry and many other places in Oxford County, Maine, have worked veins of coarse grained granite, called “pegmatite”. The mineral grains in pegmatites can be very large.



**Figure 3.** Example of a granite pegmatite ledge, showing large creamy-white feldspar crystals (above hammer) and massive quartz (Albany Rose Prospect, Albany, Maine).

### The Nevel Quarry

One of the largest Newry workings is the Nevel Quarry, known among mineral collectors as the “Twin Tunnels”. Feldspar was mined here, and the waste piles (“dumps”) have yielded specimens of many other minerals of interest to collectors. The [Mineral Database website](#) provides comprehensive lists of minerals found at the [Nevel Quarry](#) and other Maine mines.



Photo by Woodrow B. Thompson

**Figure 4.** Flooded entrance to the Nevel Quarry.



## The Dunton Quarry

This small quarry became world famous in the early 1970s, when large “pockets” of colorful tourmaline crystals were discovered here.



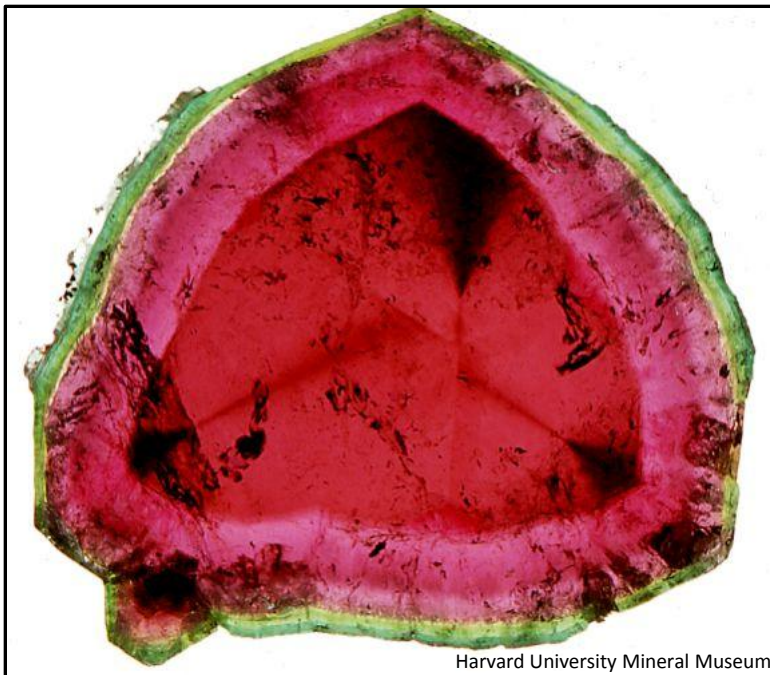
**Figure 5a.** 1976 view of entrance to Dunton Quarry workings where the large tourmaline pockets were found.



**Figure 5b.** Part of the locality as it appears today, following the removal of the underground workings. Note the white vertical pegmatite vein (center) cutting through the greenish-gray host rock and feeding into the pegmatite body at top.

Dunton Quarry Tourmaline

Lively pink, green, and blue varieties of tourmaline were found at the Dunton Quarry. Crystals that are different colors on opposite ends are called “bicolors”. Those which are green on the outside and pink on the inside are appropriately called “watermelon tourmaline”.



Harvard University Mineral Museum

**Figure 6a.** Left: Polished slice of watermelon tourmaline from the Dunton Quarry.



Robert Whitmore collection

**Figure 6b.** Large deep purplish-red tourmaline crystal found during the 1970s bonanza at Dunton Quarry. “Elbaite” is the colorful species of the tourmaline group that occurs at this locality.

### The State Mineral

Given the variety of tourmalines found at Newry and elsewhere in Maine, it is easy to see why tourmaline has been designated as the official State Mineral.



Photo by Woodrow B. Thompson

**Figure 7.** Display of Dunton Quarry tourmaline crystals and faceted gemstones in the former Perhams of West Paris mineral store.



Recent Prospecting

The ledges near the Dunton Quarry, including the location of the former small pit called the Crooker Quarry, have been prospected for tourmaline during the last few years. Much blue tourmaline has come to light, including some good gem material.



Photo by Woodrow B. Thompson

**Figure 8.** MGS field trip participants examining the rock piles in recent workings at Newry.

Blue Tourmaline

Photo by Woodrow B. Thompson

**Figure 9.** Dark-blue tourmaline crystals and a large blocky white feldspar crystal in pegmatite boulder. Some of the tourmalines show the "train wreck" habit, in which the crystals were naturally broken and bent, and then healed by quartz penetrating the fractures. Found by David Brown during MGS field trip, May, 2013



Vivianite



Photo by Woodrow B. Thompson

Maine Geological Survey

**Figure 10.** Blue vivianite (iron phosphate) coating on rock. This mineral is surprisingly abundant in the new workings near the former Crooker Quarry.



Spodumene

Photo by Woodrow B. Thompson

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**Figure 11.** The long, roughly-formed white crystal behind the hammer is spodumene. This mineral has been mined for its lithium content. Large spodumenes are common in both the Nevel Quarry and the fresh openings at Newry.



Eyes on the ground!



**Figure 12.** Mineral collectors on MGS trip, scouting the ground for interesting specimens. Many of the rare minerals at Newry are tiny crystals that grew in small cavities in the pegmatite.

## References and Additional Information

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